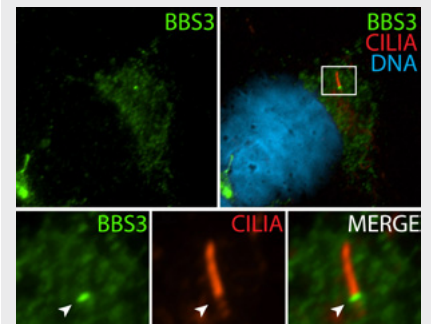
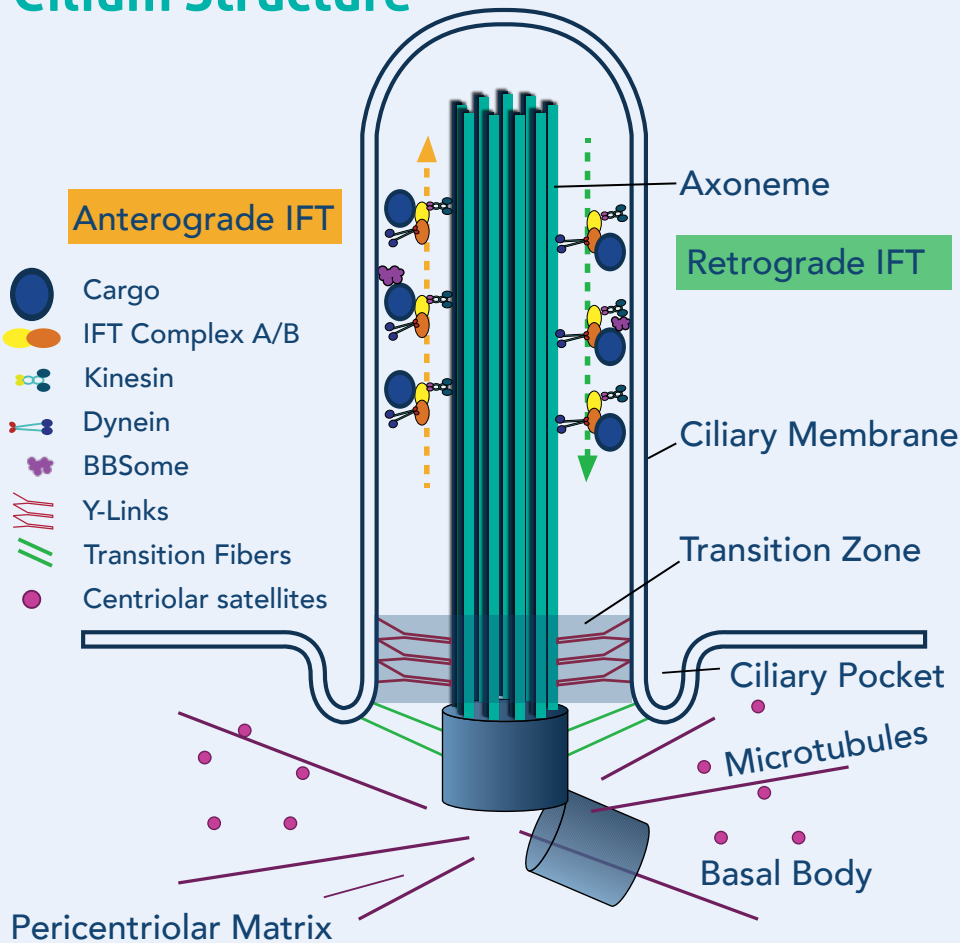


Primary Cilia Markers

A complete guide

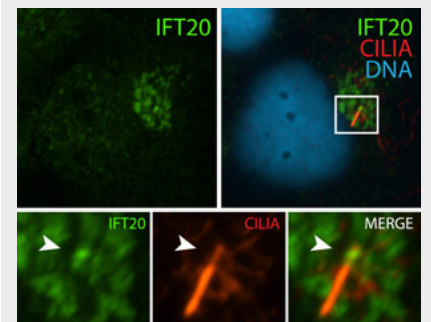
Primary cilia is a cell surface, microtubule based organelle present in most mammalian cells, that receive and transduce extracellular cues to induce intracellular signalling.

Cilium Structure



Immunofluorescence staining of BBSome complex using BBS3 antibody (12676-1-AP).

Credits: Dr. Moshe Kim



Immunofluorescence staining of IFT complex-B using IFT20 antibody (13615-1-AP).

Credits: Dr. Moshe Kim

Cilium Function

- Chemosensation
- Mechano-sensation
- pH and oxygen sensation
- Central organelle in Hedgehog signaling
- Major role in Wnt, Notch and TGF beta signaling.

Ciliopathies

- Retinitis pigmentosa
- Polycystic kidney disease (PKD)
- Joubert syndrome (JBTS)
- Bardet-Biedl syndrome
- Nephronophthisis (NPHP)
- Meckel Gruber syndrome (MKS)

Key cilia specific antibodies are available conjugated to highly bright and photostable CoraLite® dyes. These conjugated antibodies are exclusively developed for immunofluorescence.



Antibodies to Study Primary Cilia

IFT Complex A Antibodies

Catalog No.	Target	Applications	Citations
17460-1-AP	IFT140	WB, IP, IHC, IF, CoIP	51
19304-1-AP	IFT122	WB, IHC, ELISA	2
13647-1-AP	IFT144(WDR19)	WB, IP, IHC, IF, ELISA	6
24338-1-AP	IFT43	WB, IHC, IF, ELISA	5

BBSome Complex Antibodies

Catalog No.	Target	Applications	Citations
21118-1-AP	BBS1	WB, IP, IF, ELISA	1
11188-2-AP	BBS2	WB, IP, IHC, IF	12
12676-1-AP	BBS3(ARL6)	WB, IP, IHC, IF	7
12766-1-AP	BBS4	WB, IHC, IF	12
14569-1-AP	BBS5	WB, IP, IHC, IF	22
13078-1-AP	BBS6(MKKS)	WB, IHC, IF	
18961-1-AP	BBS7	WB, IP, IHC	7
13458-1-AP	BBS7	IF	
12505-1-AP	BBS8(TTC8)	WB, IP, ELISA	
14460-1-AP	BBS9	WB, IP, IHC, IF	3
12421-2-AP	BBS10	WB, IF	3

Centrosome Antibodies

Catalog No.	Target	Applications	Citations
11517-1-AP	CENPJ	WB, IHC, IF	41
12794-1-AP	Centrin 1	WB, IF	26
15877-1-AP	Centrin 2	WB, IHC, IF	6
25235-1-AP	CEP110	WB, IF	
24957-1-AP	C6orf182	WB, IF	1
22050-1-AP	CEP97	WB, IP, IHC, IF	15
21815-1-AP	CEP152	WB, IP, IHC, IF	1
22227-1-AP	CEP164	WB, IP, IHC, IF	31
19856-1-AP	PCM1	WB, IP, IHC, IF, FC	12
19370-1-AP	NUP85	WB, IHC, IF	4

LIFT Antibodies

Catalog No.	Target	Applications	Citations
17711-1-AP	ARL13B	WB, IP, IHC, IF, FC	493
10961-1-AP	ARL3	WB, IHC, IF	12
67565-1-Ig	PDE6D	WB	
13065-1-AP	UNC119	IF	
14151-1-AP	RP2	WB, IP, IHC, FC	2

IFT Complex B Antibodies

Catalog No.	Target	Applications	Citations
13967-1-AP	IFT88	WB, IP, IHC, IF, CoIP	265
13615-1-AP	IFT20	WB, IP, IHC, IF, CoIP	54
17534-1-AP	IFT52	WB, IP, IF, CoIP	16
11083-1-AP	IFT57	WB, IP, IHC, IF	18
15017-1-AP	IFT27(RABL4)	WB, IHC, IF	2
11744-1-APP	IFT81	WB, IP, IHC, IF	34

MKS Module Antibodies

Catalog No.	Target	Applications	Citations
16206-1-AP	MKS1	WB, IP, IHC, IF	24
55160-1-AP	RPGRIP1L/MKS5	WB, IP, IHC, CoIP	20
22293-1-AP	CC2D2A/MKS6	WB, IHC, IF	2
15004-1-AP	TCTN1	WB, IHC, IF	25
17053-1-AP	TCTN2	WB, IHC, IF	7
16085-1-AP	TCTN3	WB, IP, IHC, IF	2
22045-1-AP	AHI1	WB, IF	4
22058-1-AP	B9D2	IHC	
13975-1-AP	TMEM67	WB, IHC, IF	24
23731-1-AP	TMEM231	IHC	

NPHP Module Antibodies

Catalog No.	Target	Applications	Citations
10585-1-AP	INVS	WB, IHC, IF, FC	7
22026-1-AP	NPHP3	WB, IP, IHC, IF	3
13812-1-AP	NPHP4	WB, IHC, IF	8
15747-1-AP	NPHP5	IF	2
22490-1-AP	CEP290	WB, IP, IHC, IF	8
55160-1-AP	RPGRIP1L/MKS5	WB, IP, IHC, CoIP	20
15693-1-AP	ATXN10	WB, IP, IHC, IF	2

Other Cilia Protein Antibodies

Catalog No.	Target	Applications	Citations
12780-1-AP	CP110	WB, IP, IHC, IF, FC	108
11931-1-AP	CSPP1	WB, IP, IHC, IF	10
15500-1-AP	DISC1	WB, IP, IHC, IF	1
13105-1-AP	KIF2A	WB, IP, IHC, IF	5
13930-1-AP	KIF3A	WB, IP, IHC, IF	11
10233-1-AP	NDE1	WB, IP, IHC, IF, co-IP	30
12058-1-AP	ODF2	WB, IP, IHC, IF	29